

FLASH MEMORY FOR REDUCING PEAK CURRENT

ABSTRACT OF DISCLOSURE

In a flash memory, non-selected bit lines prohibited from being programmed are first
5 charged to a predetermined level and then a pumping voltage is generated, the precharging
operation to all the bit lines is completed so that a peak current due to a voltage charging
concentration is suppressed or decentralized, the memory cell array is divided into two or
more portions, and the bit lines are precharged; the flash memory includes a memory cell array
having pages that each include memory cells and bit lines and source lines, a first circuit for
10 charging non-selected bit lines among the bit lines to a first voltage level at a first time, a
second circuit for generating a pumping voltage higher than a power supply voltage at a
second time, and a third circuit for charging the bit lines to a second voltage level at a third
time.